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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/625,817

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Daniel Bleichenbacher

BLEICHENBACHER 4-27

8285

47394

7590

11/23/2004

HITT GAINES, PC

LUCENT TECHNOLOGIES INC.

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EXAMINER

KIANERSI, MITRA

ART UNIT

PAPER NUMBER

2145

DATE MAILED: 11/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/625,817

Applicant(s)

BLEICHENBACHER ET AL.

Examiner

mitra kianersi

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 July 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

Claims 1-21 have been examined.

### ***Response to Arguments***

This is in response to the brief on appeal filed Augn/09/2004 (see page 1-18), filed with respect to the rejection(s) of claim(s), 1-21 under 103 (a) which have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Kreulen et al. (US Patent No. 6,424,971) and further in view of Shkedy (US Patent No. 6,236,972).

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 4-5, 6, 8, 11-13, 15, 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Kreulen et al. (US Patent No. 6,424,971).

1. Regarding claims 1, Kreulen et al. discloses a system for controlling access to a resource of a computer system, comprising:

-a problem retriever that responds to a request from a client for access to resource by retrieving one of problems and transmitting one of problems to client; (the invention relates to system and method for interactively classifying and analyzing data that is particularly applicable to classification and analysis of textual data and is useful

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in a variety of situations, and is particularly advantageous in aiding in identification of helpdesk inquiry and problem categories that are most amenable to automated fulfillment or solution. Col 1, lines 30-36)

- a solution evaluator that, upon receiving a putative solution from client, to validate putative solution and, if putative solution is valid, grants client access to resource. (the invention is useful in identifying candidate helpdesk problem categories that are most amenable to automated solutions and uses clustering techniques to identify collections of problems from free form text descriptions. It then facilitates a human user's modifications to collections as appropriate to improve the coherence and usefulness of the classification. Measures of cluster goodness, such as intra-cluster cohesion and inter-cluster distinctness are used to help the user determine which classes are the best candidates for automated solutions. Clusters are named automatically to convey some idea of their contents. Documents within each cluster may be viewed in sorted order by typicality. Ultimately, the user may use all of this information in combination to interactively modify the text categories to produce a classification that will be useful in authoring solutions. Col 1, lines 38-54)

2. Regarding claims 4, 11 and 18, a system wherein problem retriever replaces one of said problems and a corresponding one of solutions when putative solution is valid. (In the context of a helpdesk, the criteria are typically to classify together documents, which are likely to provide answers or solutions to similar helpdesk inquiries. Col 3, lines 60-63)

3. Claims 5, 12 and 19 recite similar limitation as claim 4. They are analyzed and rejected by the same rational.

4. Regarding claims 6, 13 and 20, wherein solution evaluator grants client access to resource by allocating memory associated with said resource to serve client. (this property of sparseness may be used by a compression scheme to greatly decrease the amount of storage required to hold the matrix in memory, while incurring only a small cost in retrieval speed. Col 5, lines 15-20)

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5. Regarding claims 8, a method of controlling access to a resource computer system, comprising:

- creating a database problems and corresponding precalculated solutions; (The user systems 106A-Z may obtain data from database system 102 by transmitting queries to database system 102, which performs the query by accessing data that satisfies the query, and transmits the data to the requesting user system. Col 3, lines 31-37)

- a request from a client for access to said resource by retrieving one of said problems from said database and transmitting said one of said problems to said client; (the invention relates to system and method for interactively classifying and analyzing data that is particularly applicable to classification and analysis of textual data and is useful in a variety of situations, and is particularly advantageous in aiding in identification of helpdesk inquiry and problem categories that are most amenable to automated fulfillment or solution. Col 1, lines 30-37)

- upon receiving a putative solution from said client, employing said database to validate said putative solution; and said putative solution is valid, granting said client access to said resource responding. (the invention is useful in identifying candidate helpdesk problem categories that are most amenable to automated solutions and uses clustering techniques to identify collections of problems from free form text descriptions. It then facilitates a human user's modifications to collections as appropriate to improve the coherence and usefulness of the classification. Measures of cluster goodness, such as intra-cluster cohesion and inter-cluster distinctness are used to help the user determine which classes are the best candidates for automated solutions. Clusters are named automatically to convey some idea of their contents. Documents within each cluster may be viewed in sorted order by typicality. Ultimately, the user may use all of this formation in combination to interactively modify the text categories to produce a classification that will be useful in authoring solutions. Col 1, lines 38-54)

6. Regarding claims 15, in addition to the rejection set forth in claim 1, a database of problems and corresponding precalculated solutions, (The user systems 106A-Z may obtain data from database system 102 by transmitting queries to database system 102,

which performs the query by accessing data that satisfies the query, and transmits the data to the requesting user system. Col 3, lines 31-37)

- a pointer that points to a particular problem/solution entry in said database;(keywords 204 are extracted from the inquiry and input into database system 206. The keywords may be extracted by the operator and entered into the database system. Alternatively, the entire inquiry may be entered and the keywords automatically extracted. Database system 206 uses the input keywords to select one or more classes 208A-N, which relate to documents 210. Documents 202 are grouped into the plurality of classes 208A-N according to particular criteria. In the context of a helpdesk, the criteria are typically to classify together documents, which are likely to provide answers or solutions to similar helpdesk inquiries. For the purposes of the present invention a class is defined accurately by enumeration or listing of the set of documents the class contains. A class will also be described generally be a short phrase or set of words that are most indicative of the set of documents that class comprises. This phrase or set of words is termed a class name. Database system 206 selects one or more classes based on the input keywords. The selected class or classes then define a set of documents, which ideally provide the answer/solution 212 to the inquiry. Col 3, lines 46-67 and col 4, lines 1-4)

-a problem retriever that responds to a request from a client for access to said resource by retrieving one of said problems from said database according to said pointer and transmitting said one of said problems and said pointer to said client; (the invention relates to system and method for interactively classifying and analyzing data that is particularly applicable to classification and analysis of textual data and is useful in a variety of situations, and is particularly advantageous in aiding in identification of helpdesk inquiry and problem categories that are most amenable to automated fulfillment or solution. Col 1, lines 30-37)

-a solution evaluator that, upon receiving a putative solution and said pointer from said client, employs said pointer to validate said putative solution and, solution is valid, grants said client access to database and said putative said resource. (the invention is useful in identifying candidate helpdesk problem categories that are most amenable to

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automated solutions and uses clustering techniques to identify collections of problems from free form text descriptions. It then facilitates a human user's modifications to collections as appropriate to improve the coherence and usefulness of the classification. Measures of cluster goodness, such as intra-cluster cohesion and inter-cluster distinctness are used to help the user determine which classes are the best candidates for automated solutions. Clusters are named automatically to convey some idea of their contents. Documents within each cluster may be viewed in sorted order by typicality. Ultimately, the user may use all of this information in combination to interactively modify the text categories to produce a classification that will be useful in authoring solutions. Col 1, lines 38-54)

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-3, 7, 9-10, 14, 16-17 and 21, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kreulen et al. (US Patent No. 6,424,971) and further in view of Shkedy (US Patent No. 6,236,972).

7. Regarding claims 2, 9 and 16, Kreulen et al. discloses a system for controlling access to a resource of a computer system, but Kreulen et al. fail to teach where problems comprise outputs and portions of corresponding inputs to a one-way function. However, Shkedy, on Col 18, lines 39-40, discloses a cryptographic technique using message codes where a one-way function is applied to the digital registration of seller order. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to employ a system for controlling access to a resource of a computer system, disclosed by Kreulen et al with Shkedy's cryptographic technique

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using message codes because It is becoming increasingly common for organizations to provide a helpdesk service to their customers. Typically, a customer will call the helpdesk to ask for information and to seek solutions to problems relating to the operation of products, the performance of services, necessary procedures and forms, etc. Typically, helpdesks are staffed by knowledgeable human operators, who often spend considerable time with each caller in order to answer the caller's questions. As a result, helpdesk operation is very expensive and manpower intensive. Much of the helpdesk operator's time is spent solving identical or nearly identical problems over and over again. A need arises for a technique by which the solutions to frequently recurring problems may be automated in order to improve the efficiency of helpdesk operation. In particular, what is needed is a technique that can aid in identification of helpdesk inquiry and problem categories that are most amenable to automated fulfillment or solution.

8. Regarding claims 3, 10, and 17, Shkedy discloses the invention substantially as discussed in claim 2 including a system where one-way function is a Message Digest-5 function. (Col 18, lines 40-43)

9. Regarding claims 7, 14 and 21, Shkedy disclose the invention substantially as discussed in claim 1, where a resource is selected from the group consisting of: network server (page 151, col 2, prg 2, line 12), and an electronic mail server (page 151, par 1, line 6), a main database (col 10, lines 37-38, corresponds to a cryptographic database 290)

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mitra Kianersi whose telephone number is (571) 272-3915. The examiner can normally be reached on 7:00AM-4:00PM.



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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on (571) 272-3923. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mitra Kianersi

11/08/04



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